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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,583	10/17/2003	Clifford A. Lowe	SAT.P.US0007	2259

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EXAMINER
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MATZEK, MATTHEW D

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/688,583	LOWE, CLIFFORD A.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Matthew D. Matzek	1771	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3,5,7-13 and 19-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,5,7-13 and 19-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Amendment***

1. The Amendment dated 9/29/2005, has been considered and entered into the Record. Claims 1-2, 4, 6, and 14-18 have been canceled. The art rejections associated with the canceled claims have been withdrawn. New claims 19-29 and the instantly active amended claims contain no new matter. Claims 3, 5, 7-13 and 19-27 are instantly active. The rejection of claims 4, 6 and 10 under 35 U.S.C. 112, second paragraph, has been withdrawn due to the cancellation of claims 4 and 6 and the amendment of claim 10. The rejection of claims 7, 9 and 10 under 35 U.S.C. § 102 (b) as being anticipated by Mueller et al. (US 6,180,228) has been withdrawn because the invention of Mueller et al. fails to teach a woven fabric matrix including filaments and fibers. The prior art rejections applied in the previous Office Action in view of Sandt et al. have been withdrawn as the invention of Sandt et al. has a protective layer with an outwardly facing adhesive layer.

***Claim Rejections - 35 USC § 112***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The rejected claim recites filaments or fibers being “treated” prior to incorporation into the fabric matrix. This limitation is still found to be indefinite to Examiner. Applicant is directed to specifically state what type of treatment is intended to be taught by such a limitation, because the current limitation encompasses each and every possible treatment currently known.

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Applicant's use of "treatment" is indefinite because it does not clearly define the instantly claimed article.

3. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to Examiner how an optional primer layer may be applied to the upper surface of the fabric matrix while the upper surface of the fabric matrix is to also bear a printed image. For purposes of examination, Examiner interprets claim 19 so that the primer layer may be located between upper surface of the fabric matrix and the printed image.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 3, 8, 11, 12, 19 and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller et al. (US 6,180,228).

a. Mueller et al. disclose an outdoor advertising or display system including a multi-layer graphic article intended for application to an outdoor surface (Abstract). The base layer (fabric matrix or support) may be a film (16 Figs. 1 and 2), but may be reinforced with a woven or nonwoven scrim layer, or a layer of fibrous material (col. 2, lines 30-32 and col. 5, lines 37-40). Examiner equates the applied film to the instantly claimed fabric matrix and nonwoven fabric matrix. Support for said equation is provided by definitions of "textile film" and "fabric textiles" as provided by [www.fibre2fashion.com](http://www.fibre2fashion.com), which explains that a textile film is a textile material (fabric) and a fabric textile includes nonwoven articles. On a first major surface (lower surface) of the base layer an adhesive layer (22 Figs. 1 and 2) is applied (col. 5, lines 48-50). An image layer (24 Figs. 1 and 2)

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is disposed on a second major surface (upper surface) of the base layer (col. 6, lines 30-32). The image-protective component **30** overlies the image layer **24** and is substantially clear or transparent (col. 7, lines 4-13). A release liner may be placed on the adhesively treated base film (col. 4, lines 17-20). Claim 3 is rejected as small abrasive particles (**54** Fig. 2) may be embedded in the outer binder layer or protective layer to provide skid resistance on the surface (col. 8, lines 30-34).

b. The applied invention can include one or more tie layers between otherwise adjacent layers of the article (col. 5, lines 44-47). The Examiner equates the tie layers of the applied art to the primer layers inferred in the instant claims. This allows for primer layers on the upper and lower surfaces of the fabric matrix.

c. The base layer may comprise polyolefins (col. 5, lines 16-27). Claim 11 is rejected as the thickness of the base layer may be between about 1 mil (0.003cm) to about 10 mils (0.03cm) (col. 5, lines 28-32). Claim 12 is rejected as the base film adhesive layer should be applied at a thickness of about 2 mils (0.005cm) to about 10 mils (0.025cm) (col. 6, lines 20-25). Claim 21 is rejected as the image-protective layer **32** may be polyurethane (col. 7, lines 18-20). Claim 22 is rejected as layer 32 may be polyurethane, but the solvent used to create the layer is not present in the final product and as such is not part of the instantly claimed/applied article. Claim 23 is rejected as layer **32** may further comprise an acrylic adhesive (col. 7, lines 36-38). Claim 24 is rejected as the upper surface of the applied article has a textured upper surface (Figure 1).

5. Claims 19, 5, 7-9, 11, 12, 20 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Kittel et al. (US 6,228,486).

- a. Kittel et al. disclose a thermal transfer laminate comprising a facestock (fabric matrix or support), an underlying adhesive layer, an overlying adhesive layer (primer), a transparent, abrasion resistant layer (protective coating) overlying the adhesive layer and another overlying adhesive layer on top of the abrasion resistant layer (Abstract). In one embodiment an ink or graphic layer overlies the upper surface of the facestock layer (Abstract). Examiner takes the position that the protective coating layer includes the abrasion resistant layer and underlying adhesive layer. The instant claims do not preclude such an embodiment.
- b. Claims 7 and 8 are rejected as the facestock layer may comprise a core that may be made of either woven or nonwoven fabric (col. 3, lines 38-40).
- c. Claims 5, 19, 20 and 25 are rejected as tie layers of adhesive resin (primer) may be placed on the upper and lower surfaces of the facestock layer (col. 8, lines 59-61). These adhesive tie layers may comprise polyurethane (col. 9, lines 48-67). The facestock layer (fabric matrix) typically has a thickness of about 1 to about 25 mils or 0.0025 cm to 0.63 cm (calculation performed by Examiner) (col. 3, lines 9-12). The adhesive layer thickness may range from about 0.00025 cm to 0.013 cm (calculation performed by Examiner) (col. 3, lines 15-18).

***Claim Rejections - 35 USC § 103***

6. Claims 5, 20 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (US 6,180,228). The invention of Mueller et al. is silent as to the composition and thicknesses of the primer layers and the use of protective layer from about 7 to 8 mils.

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a. Claims 5, 20 and 25 are rejected as it would have been obvious to one of ordinary skill in the art at the time of the invention to have used either acrylic or urethane resins in the primer layers. The skilled artisan would have been motivated by the fact that both acrylic and urethane resins have been disclosed throughout the invention of Mueller et al. (col. 5, lines 60-65, col. 7, lines 36-38).

b. Claim 29 is rejected as it would have obvious to one of ordinary skill in the art at the time of the invention to have made the outer protective layer in the instantly claimed ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges only involves routine skill in the art. *In re Aller*, 105 USPQ 233.

7. Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (US 6,180,228), as applied above to claims 19, and further in view of Ho et al. (US 5,468,532).

The invention of Mueller et al. is silent as to the thicknesses of the protective layer.

a. Ho et al. disclose a multilayer graphic article comprising a substrate, at least one color layer disposed on the substrate, and a protective surface layer that overlies the substrate and the color layer (Abstract). Example 13 teaches a 51 microns or 2 mil protective surface layer.

b. Since Mueller et al. are from same field of endeavor (i.e. multilayer graphic articles) the purpose disclosed by Ho et al. would have been recognized in the pertinent art of Mueller et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the protective surface layer of Mueller et al. with

the thickness taught by Ho et al. The skilled artisan would have motivated by the desire to successfully create a multi-layer graphic article with a protective coating thick enough to maintain the integrity of the underlying graphic/image layers.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as obvious over Kittel et al. (US 6,228,486). While Kittel et al. is silent to the specific composition of the woven or nonwoven fabrics used in the facestock layer, it would have been obvious to have made said fabric from chemical species listed in instant claim 10 as it is disclosed that the fabric is to be made from natural or synthetic fibers and Kittel et al. teach the use of polyamides and polyesters in the facestock layer (col. 3, lines 37-63). The Examiner interprets that the compositions taught by Kittel et al. for the polymeric film of the facestock are suitable materials for nonwoven or woven substrates since the reference teaches that the facestock may include both films and nonwoven/woven substrates it would have been obvious to one of ordinary skill in the art at the time of the invention to have made both layers out of the same material. The skilled artisan would have been motivated to use a constant chemical composition throughout the invention in efforts to minimize costs and maximize the compatibility between layers.

9. Claims 13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kittel et al. (US 6,228,486). The invention of Kittel et al. is silent as to making the graphic article with outer protective layers with the instantly claimed thicknesses. Claims 13 and 29 are rejected as it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have made the protective layer of Kittel et al. in the instantly claimed ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges only involves routine skill in the art. *In re Aller*, 105 USPQ 233.



***Response to Arguments***

10. Applicant's arguments filed 9/29/2005 have been fully considered but they are not persuasive.
11. Applicant argues that the limitation "treated" is not indefinite. This argument has been addressed supra in the maintained rejection of claim 9 under 35 USC § 112.
12. Applicant argues that Mueller et al. (US 6,180,228) fails to suggest that a fabric matrix or support can be printed. This argument has been addressed supra. Applicant is directed to section 4a of this Office Action.
13. Applicant argues that Kittel et al. (US 6,228,486) fails to teach the graphics layer in direct contact with the outer protective layer. Examiner takes the position that the protective coating layer includes the abrasion resistant layer and underlying adhesive layer. The instant claims do not preclude such an embodiment.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdm

*MSM*



**NORCA TORRES  
PRIMARY EXAMINER**